

Electrolytic Separation of Indium, Thallium, Zinc, SOV/32-25-7-7/50  
Cadmium and Their Definition From a Weighed-in Substance

hydration products of a certain compound were used (Table 1). An already described electrolyzer was used (Ref 1). The given working method shows, among other things, that the Zn added to the solution was determined in a potentiometric or volumetric way. In was precipitated by means of ammonia, and after its resolution it was polarographically determined. In the separated filtrate Tl and Cd it was again polarographically determined. The achieved determination results are given (Table 2). The described method is recommended for the analysis of the extraction of rare elements as well as for the determination of In and Tl in the dust of the factories of heavy nonferrous metallurgy. The course of the analysis is given. There are 2 tables and 4 Soviet references.

ASSOCIATION: Vsesoyuznyy-nauchno-issledovatel'skiy gorno-metallurgicheskii institut tsvetnykh metallov (All-Union Mining and Metallurgical Scientific Research Institute for Nonferrous Metals)

Card 2/2

25426  
S/137/61/000/006/020/092  
A006/A101

18-3100

AUTHORS: Sayun, M.G., Tsyb, P.P.

TITLE: On indium potentials in electrolysis of its sulfate solutions with mercury electrode

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 20, abstract 60169.  
("Sb. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met", 1959, no.5, 221 - 229)

TEXT: The authors studied In potentials in electrolysis of its sulfate on amalgams with high In content, in dependence on its concentration in amalgams, D and temperature. Ten ml Hg or In-amalgam were used as one electrode and Pt-wire as the second electrode. Amalgams with 0.01 and 0.1 g-atom In concentration per 1 l Hg were obtained by electrolysis; with 1, 5, 10, 20 and 30 g-atom In concentration per 1 l Hg, by dissolving In metal in Hg, at 20°C. The test temperature was 20, 50 and 80°C; D was 0.1; 0.5; 10; 30; 60 ma/cm<sup>2</sup>. At D = 0.1, 1 ma/cm<sup>2</sup> the voltage on the electrolyzer terminals was < 0.1 v. At D > 5 ma/cm<sup>2</sup> In and H<sub>2</sub> ions discharge simultaneously on the cathode; the process is accompanied by considerable polarization. With a higher In concentration in the amalgam, raised

Card 1/2

25426

S/137/61/000/006/020/092  
A006/A101

On indium potentials ...

from 1 to 30 g-atom per 1 l Hg, the anode potential is shifted toward the side of negative values by 0.13 v and attains a value of - 0.43 v at low D and 20°C. At low D (0.1  $\text{mA}/\text{cm}^2$ ) the values of the anode and cathode potentials coincide and differ only slightly from the potentials of pure In, when taking into account the In-concentration in the amalgam. If D increases from 1 to 100  $\text{mA}/\text{cm}^2$ , the anode potential is shifted toward the side of positive values by 0.1 v. The authors established also the dependence of the cathode potential, during electrolytic In-deposition, and of the anode potential, during electrolytic decomposition of the amalgam in a sulfuric acid solution, on the In concentration in the amalgam within 1 - 30 g-atom per 1 l Hg.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

SAYUN, M.G.; YURASOVA, G.M.; IVANOVA, R.G.; MASHUKOV, A.Ya.

Xylenol orange in the complexometric determination of lead in lead concentrates. Zav.lab. 27 no.8:961-963 '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskiy institut tsvetnykh metallov.  
(Lead--Analysis)

33275

S/078/62/007/002/001/019  
B119/B110

5.2300 1087 1530 1274

AUTHORS: Sayun, M. G., Tsareva, K. Kh.

TITLE: Cementation of rare-earth elements with amalgams of alkali metals

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 2, 1962, 227 - 232

TEXT: Cerium chloride and the oxides of Y, La, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tu, Yb, and Lu converted to chlorides were shaken for 1 min in a buffer solution (hydrochloric acid - sodium acetate buffer) in the pH range from 1.09 to 5.20 with sodium amalgam (10 ml of 0.2% amalgam per 100 mg of metal oxide). After the end of cementation, the resulting amalgam was separated from the remaining solution, the pH in the latter was measured with a glass electrode and an JW-5 (LP-5) tube potentiometer, and the content of rare-earth metals (REM) was determined by the oxalate technique. The content of REM in the amalgam was likewise determined. The elements La, Ce, Pr, Nd, Sm, Eu (Ce group), Yb and Gd (Y group) were cemented, the latter, however, only slightly. The degree of cementation decreases with increasing atomic number (decreasing ionic radius) (degree

Card 1/3

33275  
S/078/62/007/001/019  
B119/B110

# Cementation of rare-earth...

of cementation in % with initial solutions of pH=1.09: La 68.8; Ce 66.5; Pr 66; Nd 58.4; Sm 27.5; Eu 18.8; Yb 17). With increasing pH of the initial solution the degree of cementation increases equally to reach a maximum at pH=4.19 - 4.58, followed by a decrease with further pH increase (maximum values of the degree of cementation in %: La, Ce, Pr, Sm, Eu, Yb 100 each; Nd 93; Gd 1; Eu and Yb do not show any further drop of the degree of cementation with further pH increase). With the aid of 0.06% Li amalgam, which is equivalent to 0.2% Na amalgam, of the elements of the Y group, only Gd could be converted to its amalgam (maximum degree of cementation 35%). Theoretically, the degree of cementation should rise with increasing difference between the normal redox potentials of the alkali-metal amalgam and the REM amalgam. The nonconformity of this assumption with test results is attributed to the tendency of REM to form complexes with acetate ions, which grows with decreasing radius of the REM ions. Two papers by D. I. Ryabchikov, Yu. S. Sklyarenko, N. S. Stroganova (Ref. 6: Zh. neorgan. khimii, 1, 1954 (1956)); Ref. 7: Zh. neorgan. khimii, 4, 1985 (1959)) are referred to. There are 1 figure, 3 tables, and 7 references: 2 Soviet and 5 non-Soviet. The four references to English-language publications read as follows: I. K. Marsh. J. Chem. Soc.,

Card 2/3

SAYUN, M.G.; TIKHANINA, S.P. /

Complexometric method of determining indium in concentrates.

Zav.lab. 28 no.5:544-546 '62.

(MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskiy  
institut tsvetnykh metallov.

(Indium--Analysis) (Complex compounds)

S/137/63/000/002/015/034  
A006/A101

AUTHORS: Sayun, M. G., Tsareva, K. Kh.

TITLE: Electrolytical method of praseodymium amalgam decomposition

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1963, 31, abstract 2G168  
("Sb. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met.", 1962,  
no. 7, 153 - 162)

TEXT: The authors studied the dependence of the anode potential during the electrolytical decomposition of a Pr amalgam in a sulfuric acid solution upon the Pr concentration in the amalgam at different D and temperatures. The amalgam contained 0.01; 0.1 and 1 g-atom Pr per 1 liter Hg. D varied from 0.1 to 100 mamp/cm<sup>2</sup>, the temperature was 20, 50 and 80°C. It was established that at a higher Pr concentration in the amalgam, increased from 0.01 to 1 g/atom per 1 liter Hg, maximum changes in the potential are 0.65 v (80°C, 50 mamp/cm<sup>2</sup>). With D increased from 1 to 100 mamp/cm<sup>2</sup>, the anode potential is shifted sharply to the positive side. With a temperature rise by 1°C the anode potential changes by about 0.01 v. With higher Pr concentration in the electrolyte increased from

Card 1/2



Electrolytical method of...

S/137/63/000/002/015/034  
A006/A101

0.01 to 0.1 g/ion per 1 liter, the anode potential is somewhat shifted to the electro-negative side, changes in the acidity of the solution from 0.1 to 5 g-equ per 1 liter shifts also the anode potential toward the side of electronegative values. At a decrease of  $D_a$  from 100 to 10 mamp/cm<sup>2</sup>, Pr is transferred in quantities from the amalgam into the solution. The current efficiency (in conversion to a trivalent metal) at  $D = 1 - 100$  mamp/cm<sup>2</sup> is 100 - 76%. The temperature increase entails a considerable growth of current efficiency.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

S/137/63/000/002/012/034  
A006/A101

AUTHORS: Sayun, M. G., Tsareva, K. Kh.

TITLE: Neodymium cementation with amalgams of alkali metals

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1963, 29, abstract 20159  
("Sb. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met.", 1962,  
no. 7, 312 - 317)

TEXT: The authors studied cementation conditions of Nd with Na and K amalgams from chloride-acetate, acetic acid, citric-acid and alcoholic solutions. It was established that from chloride-acetate solutions ( $\text{Nd}_2\text{O}_3$  content 100 mg, Hg volume 10 ml) in a 4.19 - 4.58 pH range, Nd is cemented to 93% with 0.2% Na amalgam. With a higher concentration of the alkali metal in the amalgam, Nd is cemented quantitatively. An X-ray structural analysis has shown that the precipitate of Nd hydroxide is amorphous. Cementation from the other aforementioned solutions did not yield positive results. There are 20 references.

[Abstracter's note Complete translation]

G. Svodtseva

Card 1/1

L 10515-65 EWT(m)/EWP(b) AFETR JD/JG

ACCESSION NR: AP4040535

S/0186/64/006/003/0360/0366

AUTHOR: Sayun, M. G.; Tsareva, K. Kh.

TITLE: Electrolytic method of decomposing cerium amalgam

SOURCE: Radiokhimiya, v. 6, no. 3, 1964, 360-366

TOPIC TAGS: cerium amalgam, cerium recovery, electrolytic extraction, cerium, reduction potential, electrolysis, decomposition

ABSTRACT: A method for electrolytically extracting cerium from its amalgam was worked out with the help of cerium-141 radioactive isotope. The relationships between the anode potential in the electrolytic extraction of cerium amalgam with  $H_2SO_4$  and cerium concentration (from 0.01 to 1 gm. atom/l.), current density and temperature were investigated. Increasing the temperature has a significant effect on anode potential (reaching 0.011 v./l.), shifting it toward more electro-negative values. With increasing cerium concentration the potential decreases; this shift toward electronegative values is most pronounced at 20C and decreases as the temperature increases. The process of cathodic extraction of cerium and of the anodic dissolution of its amalgam is irreversible. The anodic potential

Card

1/2

L 10515-65  
ACCESSION NR: AP4040535

of cerium amalgam is less than -0.77v., which is almost 1 volt more electropositive than the reduction potential of cerium on the mercury cathode (-1.730 v). Cerium can be quantitatively extracted from its amalgam using a current density of 10

and 3 figures.

ASSOCIATION: None

SUBMITTED: 28 Nov 62

ENCL: 00

SUB CODE: MH, GC

NO REF SOV: 002

OTHER: 001

Card

2/2

SAYUN, M.G.

Electrolytic method of recovering rare-earth elements  
from amalgams. Sbor.trud. VNIITSVETMET no.9:83-87 '65.  
(MIRA 18:11)

SAYUN, M.G.; TSAREVA, K.Kh.

Decomposition of lanthanum and neodymium amalgams by  
electrolysis. Sbor.trud. VNIITSVETMET no.9:88-100  
'65. (MIRA 18:11)

TIMOFEEVA, T.G.; SAYUN, M.G.

Amalgam method of separating europium from iron and cobalt.  
Sbor.trud. VNIISVETMET no.9:101-104 '65.

(MIRA 18:11)



SAITSEVA, M. A.

S. S. Voyutskiy and M. A. Saitseva

"Solubility and Its Significance in Emulsion Polymerization", Advances in Chemistry,  
16, 69-82, 1947, Moscow

ABSTRACT AVAILABLE

D-50054

SAYUSHEV, V.

Facing the new school year. Prof.-tekh. obr. 22 no.6:1-2  
Je '65. (MIRA 18:7)

1. Zamestitel' predsedatelya Gosudarstvennogo komiteta po  
professional'no-tekhnicheskomu obrazovaniyu pri Gosplane  
SSSR.

SAYUSHEV, V.

Your responsibilities and authority. Komm. Vooruzh. Sil 4 no.16:  
55-63 Ag '64. (MIRA 17:10)

1. Sekretar' Tsentral'nogo komiteta Vsesoyuznogo Leninskogo kom-  
munisticheskogo soyuza molodezhi.

SAYUSHEV, V.A.; SOLOV'YEV, N.P.

Youth of Leningrad gain speed. Mashinostroitel' no.1;28-29 Ja  
'61. (MIRA 14:3)

1. Sekretar' Leningradskogo obkoma Vsesoyuznogo Leninskogo kommunisti-  
cheskogo soyuza molodezhi (for Sayushev). 2. Zamestitel'  
zaveduyushchego otdelom komsomol'skikh organov Tsentral'nogo komiteta  
Vsesoyuznogo Leninskogo kommunisticheskogo soyuza molodezhi  
po RSFSR (for Solov'yev).  
(Leningrad—Communist Youth League)

SAYUSHIKINA, Ye. N.

"The Use of Ion-Exchange Chromatography in Analytical Chemistry." Cand  
Chem Sci, Moscow Order of Lenin Chemico-technological Institute D. I. Mendeleev,  
15 Dec 54. (VM, 6 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR  
Higher Educational Institutions (12)  
SC: Sum. No. 556, 24 Jun 55

VIL'BERG, S.S. [deceased]; DROZDOV, V.A.; KARATEYEV, D.A. [deceased];  
MYSHLYAYEVA, L.V., dots.; SAYUSHKINA, Ye.N.; SENETSKAYA,  
L.P.; CHIVIKOVA, A.N.; DRAKIN, S.I., dots., retsenzent

[Methodological textbook for independent student work in a  
course of analytical chemistry] Uchebno-metodicheskoe po-  
sobie dlia samostoiatel'noi raboty studentov nad kursom  
analiticheskoi khimii. Moskva, Mosk. khimiko-tekhnolog.  
in-t, 1964. 150 p. (MIRA 18:12)

KRESHKOV, A.P.; SAYUSHKINA, Ye.N.; DROZDOV, V.A.

Preparation of nonaqueous solutions of hydroxides of quaternary ammonium bases by means of ion exchange. Zhur.prikl.khim. 38  
no.11:2398-2401 N '65. (MIRA 18:12)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I. Mendeleeva. Submitted December 10, 1963.

KRESHKOV, A.P.; SAYUSHKINA, Ye.N.; DROZDOV, V.A.

Preparation of tetramethyl ammonium hydroxide solution by  
the ion-exchange method. Zhur. prikl. khim. 37 no.9:1894-  
1898 S '64. (MIRA 17:10)

1. Moskovskiy khimiko-tehnologicheskii institut imeni  
Mendeleeva.



Sayushkina, Ye. N.

USSR/Analytical Chemistry - Analysis of inorganic substances

G-2

Abs Jour : Referat Zhur - Khimiya, No 3, 1957, 8431

Author : Kreshov, A. P. and Sayushkina, Ye. N.  
 Inst : Moscow Chemical Engineering Institute  
 Title : Separation of Copper and Lead Cations by Ion Exchange Chromatography

Orig Pub : Tr. Mosk. khim.-tekhnol. in-ta, 1956, No 22, 116-122

Abstract : In the presence of tartaric (or citric) acids and ammonia,  $\text{Cu}^{2+}$  forms a complex cation  $[\text{Cu}(\text{NH}_3)_4]^{2+}$  (I), and  $\text{Pb}^{2+}$  --  $[\text{Pb}(\text{C}_4\text{H}_2\text{O}_6)]^{2-}$  (II); when a solution containing the above-indicated complexes is passed over a cation-exchange resin, I combines with the active groups of the exchange resin, whereas II remains in the eluate. The separation of the cations has been carried out using Sul'fougol, Espatit-1, SBS, SDV-2, and SDV-3 cation exchange resins. The over-all resolution, exchange rates, and the elution of the adsorbed  $\text{Pb}^{2+}$  from the cation-exchange resins have been studied. Type SDV-2 and SDV-3 cation-exchange resins appear to possess the best exchange and kinetic properties. The authors propose the following method for the separation of  $\text{Cu}^{2+}$  and  $\text{Pb}^{2+}$ : to 50-

Card 1/

-16-

KFESHKOV, A.P.; YAROVENKO, A.N.; SAYUSHKINA, Ye.N.; ZELENINA, L.N.

Using the method of differential titration in nonaqueous solutions  
for the determination of salts. Izv.vys.ucheb.zav.; khim. i khim.  
tekh. 8 no.2:196-202 '65. (MIRA 18:8)

1. Moskovskiy khimiko-tekhnologicheskij institut imeni Mendeleyeva,  
kafedra analiticheskoy khimii.

SAYOSH KINA, YEN

18 27  
✓ Separation of copper and nickel by ion-exchange chro-  
matography. A. P. Krasikov and E. N. Davushkina (D. I.  
Mendeleev Chem.-Technol. Inst., Moscow). Zhur. Anal.

7  
4E2C  
4E3D

4E4

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447510010-8

eluted with a soln. of 5 g. NaOH and 5 ml. glycerol in 100  
ml. H<sub>2</sub>O. M. Rosen

NS ~~13~~ 13

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447510010-8"

L 40105-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6019564

SOURCE CODE: UR/0080/66/039/006/1256/1259

AUTHOR: Sayun, M. G.; Timofeyeva, T. G.

ORG: All-Union Scientific Research Mining and Metallurgical Institute of Nonferrous Metals "VNIITsVETMET" (Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskiy institut tsvetnykh metallov "VNIITsVETMET")

TITLE: Amalgam method of removal of cerium from samarium

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 6, 1966, 1256-1259

TOPIC TAGS: cerium, samarium, anodic oxidation, *CHEMICAL SEPARATION, AMALGAM,*

ABSTRACT: The object of the study was to investigate the feasibility of separating samarium from cerium by an amalgam method involving control of the anodic potential. Cerium was determined quantitatively by radiometric or spectrophotometric analyses. Depending upon the temperature, anodic current density and other factors, the decomposition of samarium amalgam begins at -1.3 to -1.2 V, and that of cerium, at -0.9 to -0.5 V. A mixed cerium-samarium amalgam was decomposed by controlling the anode potential; after the extraction of samarium from the amalgam, the anode potential was found to jump sharply upward to values necessary for the oxidation of cerium. This proved the feasibility of removal of cerium from samarium by the controlled potential method. Experiments showed that two consecutive operations of separation can produce a samarium concentrate of almost 100% purity. Orig. art. has: 1 figure and 1 table.

SUB CODE: 07, 11/ SUBM DATE: 14Jan63/ ORIG REF: 002/ OTH REF: 002

Card 1/1

UDC: 546.659+546.655+66.067.8

SAYUTIN, V., inzhener.

Flooring slabs with subsequent stressing reinforcement. Stroitel' 2  
no.10:25 0 '56. (MIRA 10:1)  
(Concrete slabs) (Prestressed concrete)

SAYUTINA T. A.

Carboniferous Tabulata of the Kuznetsk Basin and their distribution.  
Biol.MOIP.Otd.geol.38 no.2:162 Mr-Ap '63.

(MIRA 16:5)

(Corals, Fossil)

SAYUTINA, T.A.

Colonial Devonian Rugosa of Transcaucasia. Paleont. zhur.  
no.4:4-10 '65. (MIRA 19:1)

1. Paleontologicheskii institut AN SSSR. Submitted Jan. 21, 1964.



BOROCZ, Lajos, dr.; SAZABO, Imre, dr.

New method for the fixation of cannules in veins. Orv. hetil.  
97 no.37:1032-1034 9 Sept 56.

1. A Budapesti Orvostudományi Egyetem Sebesztovábbképző Klinikájának  
(igazgató: Littmann, Imre, dr. egyet. tanár) közleménye.  
(VEINS, surg.  
fixation of cannules, new method (Hun))

SAZAK, E.

Singing at the foot of Praded. p. 304.  
ZELEZNICE, Prague, Vol. 4, no. 11, Nov. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,  
June 1956, Uncl.

SAZAMA, Jiri

Little mechanization, a help in metalworking on constructions, assembling, and repair, and in small local production and maintenance services. Elektrotechnik 18 no.11:332 N°63.

1. Naradi, zavod 6, Ceska Lipa.

ŠAZAMA, Jiri

Struggle against tiresome work; experience with high-frequency  
drillers in mining mechanization. Elektrotechnik 19 no.5:155  
My '64.

1. Naradi, zavod 6, Ceska Lipa.

SAZAMA, Leon, doc. MUDr

~~SAZAMA, Leon, doc. MUDr~~  
Rudko's extra-oral splint, Cesk.stomat. no.6:253-256 Nov.55.

1. Stomatologická klinika v Hradci Králové  
(MANDIBLE, fractures,  
ther., Rudko's extra-oral splint)  
(FRACTURES,  
mandible, ther., Rudko's extra-oral splint)

SAZAMA, Leon, doc. MUDr

Rudko's extra-oral splint, Cesk.stomat. no.6:253-256 Nov.55.

1. Stomatologicka klinika v Hradci Kralove  
(MANDIBLE, fractures,  
ther., Rudko's extra-oral splint)  
(FRACTURES,  
mandible, ther., Rudko's extra-oral splint)

SAZAMA, Leon, MUDr, doc.; JAROS, Otakar, MUDr; VORTEL, Vladimir, MUDr

Cerebral abscess of dental origin. Cesk. stomat. no.3:111-117  
June 54.

(BRAIN, abscess  
dental origin)

(TEETH, abscess  
alveolar, causing brain abscess)

SAZAMA, Leon, MUDr

Reaction of the organism in dental diseases. Prakt. zub. lek.  
2 no.3:49-57 1954.

(~~TEETH~~, diseases,

\*reaction of whole organism in)



SAZAMA, L.

Disorders of Stensen's duct. Cesk. stomat. 65 no.5:352-358  
S '65.

20 Years of the stomatological clinic in Hradec Kralove.  
Ibid.:387-389

1. Stomatologicka klinika lekarske fakulty Karlovy University  
v Hradci Kralove (prednosta prof. dr. L. Sazama, CSc.).

SAZAMA, L.; JICHA, J.

Changes in the pH of saliva after the addition of various kinds of carbohydrate diets. Cesk. stomat. 65 no.6:443-452 N '65.

1. Stomatologicka klinika lekarske fakulty Karlovy University v Hradci Kralove (prednosta prof. dr. L. Sazama, CSc.) a Ustredni laborator fakultni nemocnice Krajskeho ustavu narodniho zdravi v Hradci Kralove (vedouci MUDr. J. Jicha).

SAZAMA, L.

- [illegible]

SAZAMA, Leon

The technic of sialography. Cesk.otolar.9 no.5:299-302 0'60.

1. Stomatologicka klinika v Hradci Kralove, prednosta doc.dr. .

L. Sazama.

(SALIVARY GLANDS radiography)

SAZAMA, Leon, CSc., prof. MUDr.

The importance of sialography for the diagnosis of salivary gland diseases. Sborn.ved.prac.lek.fak.Karlovy.univ. (Hrad Kral) 5 no.4/5: ~~Suppl.~~ 219-247 '62.

1. Prednosta stomatologicke kliniky, Lekarske fakulty Karlovy university v Hradci Kralove.

\*

SHIKHA, Vladimir [Sicha, Vladimir]; SAZAMA, Leon

Effect of fatigue on the healing of mandibular fractures  
after irradiation. Cesk. otolaryng. 12 no.6:81-83 D'63.

1. Stomatologicheskaya klinika Meditsinskogo fakul'teta  
v Gradtse Kralove; rukovoditel': prof. dr. med. L.Sazama,  
kand.med.nauk.

\*

SAZAMA, R.

Do not underestimate the danger of accidents caused by electric current!

P. 18. (ELEKTROTECHNIK) (Praha, Czechoslovakia) Vol. 13, no. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, May 1958

SAZAMA, R.

Consequences of insufficient cooperation between design engineers and maintenance engineers of electric machinery. p. 368.

ELEKTROTECHNIK Vol. 10, no. 11, Nov. 1955

Czechoslovakia

Source: EAST EUROPEAN LISTS Vol. 5, no. 7 July 1956



SAZAMA, Rudolf

Protective relay for gas furnaces. Elektrotechnik 19 no.11:  
320 N '64.

1. Zavody V.I.Lenina National Enterprise, Plzen.

SAZANOV, A.

MEL'NIKOV, V., (Col, Candidate of Economic Sciences) - coauthor with A. SAZANOV of the article, "Socialist Property: The Basis of the Production Relations of Socialism," which appears in Propagandist i Agitator, no. 3, 1954, of the Main Political Administration, Ministry of Defense USSR. (Krasnaya Zvezda, 17 Feb 54)

SO: SUM 163, 19 July 1954.

SAZANOV, A. A.

Cand. Tech. Sci.

Dissertation: "Concerning the Problem of Cooling in Wine-Making." Moscow Technological  
Inst of the Food Industry, 25 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

*SAZANOV, A.A.*

AUTHORS: Vöskresenskiy, V.A., Sazanov, A.A. 32-8-25/61

TITLE: An Accelerated Method for the Determination of Wood Dampness  
(Uskorennyy metod opredeleniya vlazhnosti drevesiny)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 947-948 (USSR)

ABSTRACT: The here suggested method is based upon the property of wood easily to soak up certain organic liquids. On that occasion the spot which develops on the wood after the drop fell on it is the larger the moister the wood is. 98 % acetic acid, alcohol rectificate and acetone, which are soluble in water in any amounts, may be used as liquids in this case.

The course of the experiment: Boards of spruce and fir (25o-25o-2o) were taken as samples. 2o drops of colored reagent were placed on the freshly planed surface by means of a dropping device. The drops formed spots of unequal ellipsoidal forms. The diameter of a spot was calculated according to the formula

$d = \frac{a+b}{2}$ , where a and b signify the largest and the smallest diameter. For 2o drops applies  $d_{cp} = \frac{(d_1 + d_2 \cdot d_{2o})}{2o}$ . Parallel to it, on the same sample, the standard test was performed according to Din & Stark with a xylol extraction. Based on the obtained

Card 1/2

32-8-25/61

An Accelerated Method for the Determination of Wood Dampness

results a graphical scheme was drawn. As may be seen from the scheme, the curve obtained from the application of 98 % acetic acid lies nearest to the normal linear curve. According to this method the experiment takes about 10 minutes. The determinations may also be carried out in the workshops themselves with an accuracy around 2-3 % within the framework of from 6 to 46 % moisture.

ASSOCIATION: Institute for Construction Engineers in the Mineral Oil Industry in Kazan'. (Kazanskiy institut inzhenerov-stroiteley neftyannoy promyshlennosti)

AVAILABLE: Library of Congress

Card 2/2

SOV/35-59-9-7024

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, Nr 9, p 23 (USSR)

AUTHORS: Matveyev, I.V., Sazanov, A.A.

TITLE: The Results of the Visual Observations of Variable Stars According to the Program of the Kuybyshev Astronomical Observatory 

PERIODICAL: Peremennyye zvezdy, 1957 (1958), Vol 11, Nr 3, pp 213 - 217 (Engl. résumé)

ABSTRACT: The visual observations of irregular and semi-regular variable stars are published: U Del, W Cyg,  $\rho$  Per,  $\eta$  Gem, U Hya, V 460 Cyg, V 499 Cyg, UX Dra, RY Dra, VW Dra, RY Boo, BU Tau, d Ser, U Del,  $\delta^2$  Lyr,  $\chi$  Aqr, XY Lyr.

N.Ye.K.

Card 1/1

BESSMERTNOV, M.A.; VINNIK, V.A.; MATVEYEV, I.V.; SAZANOV, A.A.

Results of visual observations of variable stars according to the  
program of the Kuybyshev Astronomical Observatory. Per.zvezdy 12  
no.5:353-357 N '58. (MIRA 13:9)

1. Kuybyshevskaya astronomicheskaya observatoriya Vsesoyuznogo  
astronomo-geodezicheskogo obshchestva:  
(Stars, Variable)

SAZANOV, A.A.

Mars in 1958-1959. Buil.BAGO no.28:32-36 '60.

(MIRA 14:6)

1. Kuybyshevskoye otdeleniye Vsesoyuznogo astronomno-geodezicheskogo obshchestva.

(Mars (Planet))



3.1520  
S/203/82/002/003/016/021  
1023/I250

AUTHOR: Nikol'skiy, G.M., Proshin, V.P. and Sazanov, A.A.

TITLE: A shadowless coronagraph with a stationary spectrograph of high dispersion

PERIODICAL: Geomagnetizm i Aeronomiya, v.2, no.3, 1962, 532-540

TEXT: The coronagraph described was constructed in the IZMIRAN. Its aim is to obtain spectra of the corona and of the chromosphere with a dispersion of  $1.5\text{\AA}/\text{mm}$  in the range of wave lengths 3600 - 12000  $\text{\AA}$ . The coronagraph consists of a mobile part ensuring a precise direction and focus of the objective and transmitting the rays into the stationary part - the spectrograph. The one-lens objective (250 mm/4000 mm) produces the Sun's image on a curved slit which can turn around the optical axis of the objective by  $360^\circ$ . A system of mirrors finally produces the image of the objective in the plane of a diffraction grid (600 lines/mm, area of  $150 \times 150 \text{ mm}^2$ ). The spectrum obtained may be photographed directly or deflected by an auxiliary plane mirror to an electronic recording system. The coronograph

Card 1/2

S/203/62/002/003/016/021  
I023/I250

A shadowless coronagraph...

graph will be tested in 1962, during the summer. There are 9 figures, 3 references. X

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln Akademii nauk SSSR (Institute of Terrestrial Magnetism, Ionosphere and Radiowave Propagation, Academy of Sciences USSR)

SUBMITTED: January 9, 1962

Card 2/2

BESSMERTNOV, M.A.; MATVEYEV, I.V.; SAZANOV, A.A.

Results of variable star observations according to the  
program of the Kuybyshev Astronomical Observatory. Per.  
zvezdy 14 no.2:104-108 Je '62. (MIRA 17:2)

SAZANOV, A.A.

Extrascliptic observations of the solar corona. Priroda 54 no.9:  
61-67 S '65. (MIRA 18:9)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya  
radiovoln AN SSSR, Moskva.

L 114583-66 EWT(1) GW

ACC NR: AP5025247

SOURCE CODE: UR/0026/65/000/009/0061/0067

AUTHOR: Sazanov, A. A. 3.1

ORG: Institute of Terrestrial Magnetism, the Ionosphere, and Radio Wave Propagation, AN SSSR, Moscow (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR)

TITLE: Uneclipsed observations of the solar corona 12.55

SOURCE: Priroda, no. 9, 1965, 61-67

TOPIC TAGS: astrophysics, coronagraphy, instrumentation, solar astronomy, solar corona, solar radiation scattering, solar spectrography

ABSTRACT: The history of experimental studies of the solar corona and the evolution of the associated instruments were reviewed. The visual intensity of the corona is given as  $10^{-6}$  —  $10^{-9}$  of the solar disc's intensity. Corona observations are said to require obstruction of the photosphere and reduction of background resulting from scattering. The scattering caused by instruments was analyzed by Bernard Leo, who developed a coronagraph with a field lens directly behind the artificial "moon" and with a Leo diaphragm. He also developed an interference-polarization filter. This instrument reduced background to  $10^{-6}$ , facilitating the study of the inner corona.

Card 1/3

UDC: 522.56

L 533-66

ACC NR: AP5025247

For more detailed corona studies, a large coronagraph was combined with a high dispersion spectrograph. At present, the SSSR is building two similar coronagraphs, one at Kislovodsk Corona Station, the other at Irkutsk. These instruments will be the largest in the world. The optics (see Fig. 1)

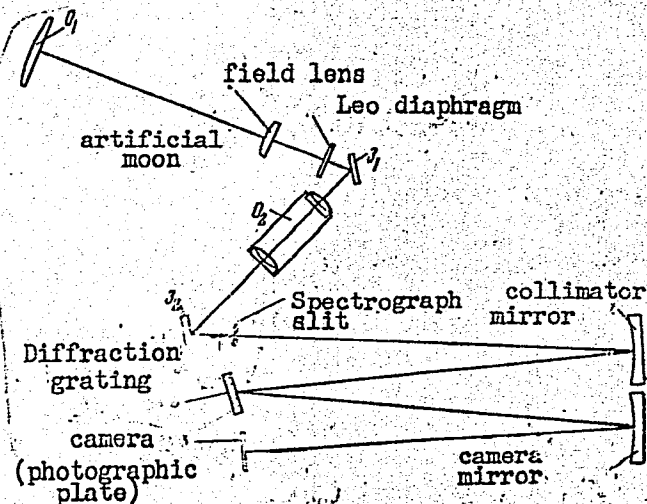


Fig. 1. Schematic diagram of a new coronagraph.

Card 2/3

L 11583-66

ACC NR: AP5025247

include a 53-cm diameter objective lens (1) with an 8-m focal length. Only the telescope moves. The spectrograph uses a 250x230-mm reflecting diffraction grating with 600 lines /mm. This instrument is 8 m long, has a dispersion of 1 $\text{\AA}$ /mm, and produces a solar image of 124-mm diameter. To reduce the background below  $10^{-6}$  for outer corona studies, a new instrument design must be perfected, with the moon located at a considerable distance in front of the objective. Such instruments have been built in the USA. Orig. art. has: 5 figures.

SUB CODE: 03/ SUBM DATE: none

FW  
Card 3/3

L 02999-67 EWT(1) GW

ACC NR: AP6033162

SOURCE CODE: UR/0033/66/043/005/0928/0935

AUTHOR: Nikol'skiy, G. M.; Sazanov, A. A.

ORG: Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation, Academy of Sciences, SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln Akademii nauk SSSR)

TITLE: The motion and nature of  $H_{\alpha}$  spicules in the solar<sup>2</sup> chromosphere

SOURCE: Astronomicheskiy zhurnal, v. 43, no. 5, 1966, 928-935

TOPIC TAGS: solar chromosphere, chromosphere spicule, photospheric radiation, corona, radial velocity, **SOLAR SPICULE**

ABSTRACT: The  $H_{\alpha}$  line profiles in 11 spicules and their radial velocities  $V_r$  are investigated using successive photographs of the spectra of spicules taken at a height of about 6000 km. Altogether 26 photographs of the spicules with an average interval of 20 sec were taken in 8 min with the IMIRAN (Institute of Terrestrial Magnetism, Ionosphere, and Radiowave Propagation) coronagraph<sup>0</sup> (principal objective 25/cm/4m, 2A/mm, equivalent focus 7 m). The radial velocities are random with time with an average period of 1 min. The sign of  $V_r$  can also vary. The main mechanism of  $H_{\alpha}$  emission of spicules is scattering of photospheric radiation. At the height of 6000 km the spicule is optically thin in  $H_{\alpha}$  ( $\tau \approx 0.05$ ) and has the following physical parameters:  $T \approx 6000^{\circ}$ ,  $n_H \approx 10^{11} \text{ cm}^{-3}$ ,  $n_e \approx 10^{10}-10^{11} \text{ cm}^{-3}$ . The chaotic

Card 1/2

UDC: 523.75



L 02999-67

ACC NR: AP6033162

motions of separate clots of matter with velocities of 10—20 km/sec play an essential role in the formation of the  $H_{\alpha}$  line profiles. About one-third of the spicules show a "doublet" structure, the doublet components having practically identical dynamic and photometric characteristics. It is possible that one-third is the lowest estimate, as the distance of  $\sim 3''$ — $4''$  between the components of the observed doublets coincides with the resolving power of the instrument. Orig. art. has: 7 figures and 3 formulas.

SUB CODE: 03/ SUBM DATE: 20Nov65/ ORIG REF: 007/ OTH REF: 007/ ATD PRESS:  
5099

Card 2/2 awm

L 02445-67 EWT(1) GW

ACC NR: AP6028800

SOURCE CODE: UR/0033/66/043/004/0868/0872

AUTHOR: Nikol'skiy, G. M.; Sazonov, A. A.

ORG: Institute of Terrestrial Magnetism, Ionosphere, and Radiowave Propagation,  
Academy of Sciences, SSSR (In-t zemnogo magnetizma, ionosfery, rasprostraneniya  
radiovoln Akademii nauk SSSR)

TITLE: Noneclipse coronographs

SOURCE: Astronomicheskii zhurnal, v. 43, no. 4, 1966, 868-872

TOPIC TAGS: eclipse, coronograph, spectrograph, ASTROPHYSIC INSTRUMENT,  
SOLAR CORONA

ABSTRACT: The simplified types of the noneclipse coronograph are critically analyzed. The necessity of constructing a large Lyot-type coronograph equipped with a stationary high dispersion spectrograph is discussed. An optical schematic diagram is given and the main characteristics are described for such an instrument, which is under construction made at the Institute of Terrestrial Magnetism and Pulkovo Observatory under the supervision of the authors. Orig. art. has: 3 figures. [CS]

SUB CODE: 03/ SUBM DATE: 20 Nov 65/ ORIG REF: 003/ OTH REF: 002

Card

1/1 *gd*

UDC: 522.56

ALEKSANDROVICH, E.-G.V.; SOKOVISHIN, V.A.; SAZANOV, A.I.

Hand-operated universal catharometric leak detector. Prib. i  
tekh. eksp. 8 no.5:162-164 S-0 '63. (MIRA 16:12)

USSR/Zooparasitology - Helminths.

G.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67528

Author : Sazanov, A.M.

Inst :

Title : The Epizootology of Fasciolosis in Ruminants and Measures for Combating It.

Orig Pub : Veterinariya, 1957, No 6, 28-30.

Abstract : Epizootological observations of fasciolosis in ruminants (Azov rayon, Don delta). Out of 7 species of fresh-eater molluscs infected with fasciolosis, the larval forms of the fasciole developed fully in *Limnaea stagnalis* in from 3-10 days to 1 month and in *Galba palustris* in 3-10 days. In the 2- and 3-month old molluscs of the latter species development ceased with the sporocyst stage. The fascioles did not develop in the *Radix ovata*, *Planorbis planorbis*, *Viviparus viviparus*, and *Succinea pfeiferi* molluscs; *G. truncatula* was infected at any stage of development.

Card 1/2

SAZANOV, A. M., Cand Vet Sci -- (diss) "Epizootology  
of fascioliasis in sheep and measures to combat  
it under ~~the~~ conditions of the <sup>Don River delta</sup> ~~delta of the Don river~~.  
(Azovskiy Rayon of ~~the~~ Rostovskaya Oblast)." Mos, 1958.  
20 pp (All-Union Order of Lenin Acad Agr Sci im V.I.  
Lenin. All-Union Inst of Helminthology im Academician  
K.I. Skryabin). 140 copies.  
(KL, 12-58, 100)

SAZANOV, A.M., aspirant.

Epizootology of fascioliasis in ruminantia and methods for its  
control. Veterinariia 34 no.6:28-30 Je '57. (MIRA 10:7)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I. Skryabina.  
(Liver fluke) (Ruminantia--Diseases and pests)

SAZANOV, A.M.

SAZANOV, A.M.

"Importance of the Blood Supply and Innervation of Muscle Grafts Used in the Treatment of Bone Defects (Experimental Anatomical Investigation)." Cand Med Sci, State Order of Lenin Inst for the Advanced Training of Physicians named S.M. Kirov, Leningrad, 1955. (KL, No 17, Apr 55 )

SO: Sum.No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16 ).

OZERSKAYA, V. N., GNEDINA, M. P., SAZANOV, A. M. (Candidates of Veterinary Sciences),  
GORINA, N. S. (Junior Scientific Co-Worker) and FALYUSHIN, V. S. (Veterinary Surgeon,  
All-Union Institute of Helminthology imeni Academician K. I. Skryabin)

"About the effectiveness of preimaginal vermifuge treatment of sheep in  
dictiocaulosis"

Veterinariya, vol. 39, no. 7, July 1962 p. 41



OZERSKAYA, V.N., kand. veterin. nauk; GNEZDINA, M.P., kand. veterin. nauk;  
SAZANOV, A.M., kand. veterin. nauk; GORINA, G.S., mladshiy nauchnyy  
sotrudnik;; FALYUSHIN, V.E., veterin. vrach

Effectiveness of the preimaginal vermifugal treatment of dictyocaulosis  
in sheep. Veterinariia 39 no.7:41-44 J1 '62.

(MIRA 18:1)

1. Vsesoyuznyy institut gel'mintologii imeni akademika K.I.Skryabina.

L 32418-65 FED-2/TEC-2/EPF(n)-2/EPA(s)-2/EPA(w)-2/ENT(m)/ENT(d)/ENP(b)/ENP(e)  
Pt-10/Pu-4, r, s, t, u, v, w, x, y, z, aa, ab, ac, ad, ae, af, ag, ah, ai, aj, ak, al, am, an, ao, ap, aq, ar, as, at, au, av, aw, ax, ay, az, ba, bb, bc, bd, be, bf, bg, bh, bi, bj, bk, bl, bm, bn, bo, bp, bq, br, bs, bt, bu, bv, bw, bx, by, bz, ca, cb, cc, cd, ce, cf, cg, ch, ci, cj, ck, cl, cm, cn, co, cp, cq, cr, cs, ct, cu, cv, cw, cx, cy, cz, da, db, dc, dd, de, df, dg, dh, di, dj, dk, dl, dm, dn, do, dp, dq, dr, ds, dt, du, dv, dw, dx, dy, dz, ea, eb, ec, ed, ee, ef, eg, eh, ei, ej, ek, el, em, en, eo, ep, eq, er, es, et, eu, ev, ew, ex, ey, ez, fa, fb, fc, fd, fe, ff, fg, fh, fi, fj, fk, fl, fm, fn, fo, fp, fq, fr, fs, ft, fu, fv, fw, fx, fy, fz, ga, gb, gc, gd, ge, gf, gg, gh, gi, gj, gk, gl, gm, gn, go, gp, gq, gr, gs, gt, gu, gv, gw, gx, gy, gz, ha, hb, hc, hd, he, hf, hg, hh, hi, hj, hk, hl, hm, hn, ho, hp, hq, hr, hs, ht, hu, hv, hw, hx, hy, hz, ia, ib, ic, id, ie, if, ig, ih, ii, ij, ik, il, im, in, io, ip, iq, ir, is, it, iu, iv, iw, ix, iy, iz, ja, jb, jc, jd, je, jf, jg, jh, ji, jj, jk, jl, jm, jn, jo, jp, jq, jr, js, jt, ju, jv, jw, jx, jy, jz, ka, kb, kc, kd, ke, kf, kg, kh, ki, kj, kk, kl, km, kn, ko, kp, kq, kr, ks, kt, ku, kv, kw, kx, ky, kz, la, lb, lc, ld, le, lf, lg, lh, li, lj, lk, ll, lm, ln, lo, lp, lq, lr, ls, lt, lu, lv, lw, lx, ly, lz, ma, mb, mc, md, me, mf, mg, mh, mi, mj, mk, ml, mm, mn, mo, mp, mq, mr, ms, mt, mu, mv, mw, mx, my, mz, na, nb, nc, nd, ne, nf, ng, nh, ni, nj, nk, nl, nm, nn, no, np, nq, nr, ns, nt, nu, nv, nw, nx, ny, nz, oa, ob, oc, od, oe, of, og, oh, oi, oj, ok, ol, om, on, oo, op, oq, or, os, ot, ou, ov, ow, ox, oy, oz, pa, pb, pc, pd, pe, pf, pg, ph, pi, pj, pk, pl, pm, pn, po, pp, pq, pr, ps, pt, pu, pv, pw, px, py, pz, qa, qb, qc, qd, qe, qf, qg, qh, qi, qj, qk, ql, qm, qn, qo, qp, qq, qr, qs, qt, qu, qv, qw, qx, qy, qz, ra, rb, rc, rd, re, rf, rg, rh, ri, rj, rk, rl, rm, rn, ro, rp, rq, rr, rs, rt, ru, rv, rw, rx, ry, rz, sa, sb, sc, sd, se, sf, sg, sh, si, sj, sk, sl, sm, sn, so, sp, sq, sr, ss, st, su, sv, sw, sx, sy, sz, ta, tb, tc, td, te, tf, tg, th, ti, tj, tk, tl, tm, tn, to, tp, tq, tr, ts, tt, tu, tv, tw, tx, ty, tz, ua, ub, uc, ud, ue, uf, ug, uh, ui, uj, uk, ul, um, un, uo, up, uq, ur, us, ut, uu, uv, uw, ux, uy, uz, va, vb, vc, vd, ve, vf, vg, vh, vi, vj, vk, vl, vm, vn, vo, vp, vq, vr, vs, vt, vu, vv, vw, vx, vy, vz, wa, wb, wc, wd, we, wf, wg, wh, wi, wj, wk, wl, wm, wn, wo, wp, wq, wr, ws, wt, wu, wv, ww, wx, wy, wz, xa, xb, xc, xd, xe, xf, xg, xh, xi, xj, xk, xl, xm, xn, xo, xp, xq, xr, xs, xt, xu, xv, xw, xx, xy, xz, ya, yb, yc, yd, ye, yf, yg, yh, yi, yj, yk, yl, ym, yn, yo, yp, yq, yr, ys, yt, yu, yv, yw, yx, yy, yz, za, zb, zc, zd, ze, zf, zg, zh, zi, zj, zk, zl, zm, zn, zo, zp, zq, zr, zs, zt, zu, zv, zw, zx, zy, zz

ACCESSION NR: AT5004722

S/2785/63/000/016/0094/0101

AUTHOR: Belonogov, A. M.; Sazanov, A. M.; Serdyuk, A. S.; Marchenko, V. P.; Rusakov, A. F.

TITLE: Spectrometer for observation of electron paramagnetic resonance in solids

SOURCE: USSR. Gosudarstvennyy geologicheskii komitet. Osnovnye konstruktorskoye

TOPIC TAGS: spectrometer, electron paramagnetic resonance, epr spectrum, automatic frequency control, klystron control

ABSTRACT: A superheterodyne EPR spectrometer is described, intended for the detection and identification of paramagnetic impurities in minerals, and for the

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447510010-8

Card 1/3

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447510010-8"

L 32418-65

ACCESSION NR: AT5004722

of the klystron. A block diagram of the spectrometer is shown in Fig. 1 of the  
Enclosure Its operation and the principal circuit elements are briefly described.  
... during the course of the

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447510010-8

Orig. art. nos. 2 figures.

ASSOCIATION: None

SUBMITTED: 00

MR REF SOV: 003

ENCL: 01

OTHER: 002

SUB CODE: 88, NP

Card 2/3

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001447510010-8"

L 32418-65

ACCESSION NR: AT5004722

ENCLOSURE: 01

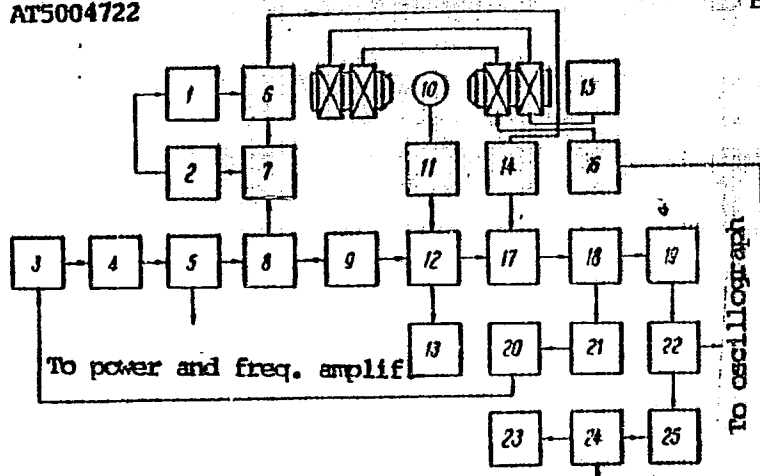


Fig. 1. Block diagram of superheterodyne epr spectrometer

1 - Heterodyne klystron, 2 - klystron frequency control, 3 - signal klystron, 4 - ferrite gate, 5, 8 - directional couplers, 6, 12 -- twin-T bridges, 7 - mixer, 9 - calibration attenuator, 10 - resonator, 11 - transformer, 13 - variable load, 14 - attenuator, 15 - power for magnet, 16 - generator and modulator, 17 - balanced mixer, 18 - if preamplifier, 19 - if amplifier, 20 - l.f. for signal klystron, 21, 22 - detectors, 23 - automatic recorder, 24 - synchronous detector, 25 - low frequency amplifier

Card 3/3

L 07457-67 EWT(1) IJP(c)

ACC NR: AP6034936

(A)

SOURCE CODE: UR/0146/66/009/005/0003/0007

AUTHOR: Sazonov, A. M.; Belonogov, A. M.; Grigor'yev, S. B.; Strakhov, N. B.; Chernov, Yu. L. 32  
B

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin) (Leningradskiy elektrotekhnicheskiy institut)

TITLE: Spectrometer for the study of broad lines of nuclear magnetic resonance

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 5, 1966, 3-7

TOPIC TAGS: spectrometer, nuclear magnetic resonance

ABSTRACT: An all-purpose nuclear magnetic resonance spectrometer has been developed for qualitative and quantitative analysis of isotopic concentrations, for the study of ultrasonic resonance absorption in the nuclei of some alkali halide crystals, and for structural measurements of natural compounds. The device incorporates commercial-type components (see Fig. 1). The NMR detector includes crossed coils and direct absorption detectors which provide high sensitivity, and a broad range of hf field intensities. The detector can register the absorption signal or dispersion signal

Card 1/2

UDC: 535.322.2



L 07457-67

ACC NR: AP6034936

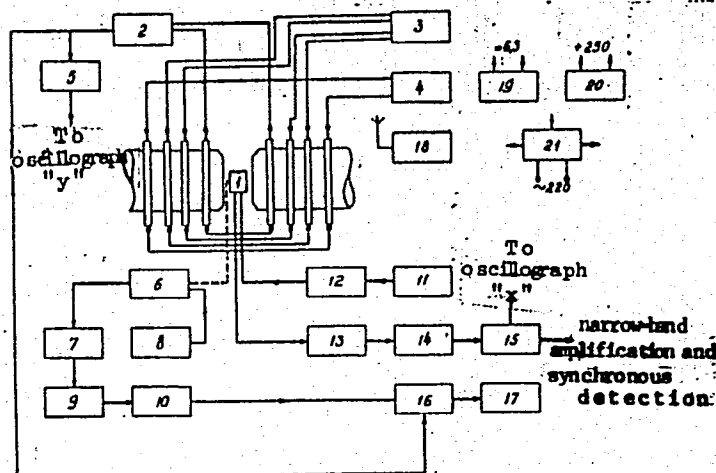


Fig. 1. Block diagram of nuclear magnetic resonance spectrometer

- 1 - NMR sensor; 2 - audio generator; 3 - device providing linear variation of magnetic field; 4 - current stabilizer; 5 - phase inverter;
- 6 - block of NMR detector; 7, 13 - hf amplifiers; 8, 14 - detector and voltmeter; 9 - calibrator;
- 10, 15 - audio amplifier; 11 - 5.2-mc crystal-controlled oscillator; 12 - power amplifier; 16 - synchronous detector;
- 17 - recorder; 18 - wave meter; 19, 20 - power sources; 21 - ferromagnetic stabilizer.

separately without distortion. The frequency range of the detector is 1—43 mc.

Orig. art. has: 3 figures.

SUB CODE: 20 / SUBM DATE: 25Aug65/ ORIG REF: 003/ OTH REF: 001/ ATD PRESS: 5104

Card 2/2

SAZANOV, Anatoliy Nikolayevich; SHAMBERG, V., redaktor; TROYANOVSKAYA, N.,  
tekhnicheskiiy redaktor

[The working of the law of value under socialism] O deistvii  
zakona stoimosti pri sotsializme. Moskva, Gos. izd-vo polit.  
lit-ry, 1955. 62 p. (MIRA 9:3)

(Value)

L 41396-66 EWT(d)/FSS-2/EEC(k)-2 BC

ACC NR: AR6014912

SOURCE CODE: UR/0124/65/000/011/A009/A009

AUTHOR: Sazonov, A. V.

TITLE: Selection of correcting devices for a power gyrostabilizer

SOURCE: Ref. zh. Mekhanika, Abs. 11A64

REF SOURCE: Tr. Leningr. in-t aviats. priborostr., vyp. 44, 1964, 21-27

TOPIC TAGS: gyrostabilizer, error correction, forced vibration, frequency characteristic

ABSTRACT: The problems connected with the selection of correcting circuits in power gyrostabilization systems are considered, taking into account elastic deformation of the gyroassembly axis. The differential equations describing the motion of the gyrostabilizer are investigated in order to obtain expressions for the frequency characteristics of the gyrostabilizer with stabilization angle. A block diagram corresponding to the investigated system of equations is presented. The expression for the frequency characteristics of the gyrostabilizer is derived. Correcting circuits for a stabilization channel, which are used to eliminate the resonance amplitude peak of forced oscillations, are analyzed. Active correcting circuits, which consist essentially of differentiator amplifiers, and passive RC circuits are considered. A comparison of the considered circuits is given from the point of view of the effect on forced oscillations of the gyrostabilizer. From the comparison it

Card 1/2

L 41396-66

ACC NR: AR6014912

follows that active four-terminal networks have the greatest flexibility in use.

V. M. [Translation of abstract]

SUB CODE: 17

Card 2/2

*lkh*

SAZANOV, B.

Educating the people is a very difficult, creative, and many sided affair. Sov.profsoiuzy 16 no.9:44-46 My '60.  
(MIRA 13:7)

1. Predsedatel' zavkoma zavoda "Dvigatel' revolyutsii."  
(Communist education)

L 34829-66 EWT(1)/EWT(m)/FCC/EWP(J)/T WW/RM/CW  
 ACC NR: AT6021085 SOURCE CODE: UR/2531/66/000/198/0089/0106  
 41  
 341

AUTHOR: Sazonov, B. I.

ORG: none

TITLE: The possible role of cosmic-ray particles in solar and tropospheric  
 correlations 12 12 12

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 198, 1966.  
 Voprosy obshchey i sinopticheskoy klimatologii (Problems of general and synoptic  
 climatology), 89-106

TOPIC TAGS: solar activity, atmospheric circulation, cosmic ray component, solar  
 wind, cosmic ray dispersion, solar wind proton

ABSTRACT: Correlations between solar activity and atmospheric circulation are dis-  
 cussed and the variation of circulation during the unproven 27-day cycle is  
 analyzed. The tropospheric and stratospheric circulation can be explained by the  
 action of high-energy particles as cosmic-ray components, without the use of solar  
 wind. Experiments and theoretical computations have shown that particles of solar  
 wind are not able to penetrate the atmosphere nearer to the South Pole than the 70°  
 S-parallel. The temperature and the pressure changes at altitudes of 50-10 mb are  
 slightly noticeable from day to day and sometimes from week to week in moderate and  
 subtropical latitudes. In the troposphere and lower stratosphere these changes are

Card 1/2

Utilization of heat from waste gases in metallurgical plants. B. V. Sazanov. *Z. Ekonomiya Topliva* 3, No. 5, 6, 7-12 (1966). M. Haseh

4175. HOT WATER BOILERS MADE FROM CAST IRON CORRUGATED ECONOMISER TUBES.  
Issarov, A.V. and Sasanov, B.V. (Za Khonomiya Topliva (Fuel Econ.),  
1949, (5), 31, 32). (L).



950. SOME QUESTIONS OF THE UTILIZATION OF FUELS AND SECONDARY SOURCES  
OF ENERGY IN THE IRON WORKS OF THE U.S.S.R. SASSEROV, B.V. (Pap. 238 G-1/27  
Feb-Mar-Apr 1956, V. 1, No. 1). (L)

SAZANOV, B.V.

137-58-5-9034

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 41 (USSR)

AUTHOR: Sazanov, B.V.

TITLE: The Significance of Gas Turbine Installations in the Metallurgical Industry and Prospects of Their Future Employment  
(Znachenkiye i perspektivy primeneniya gazoturbinnnykh ustanovok v metallurgicheskom proizvodstve)

PERIODICAL: Sb. statey po energetike. Moscow, Metallurgizdat, 1957, pp 94-112

ABSTRACT: The author shows the specifications of gas turbine systems (S) which may be employed in metallurgical plants. 1) S's utilizing the excess pressure (P) of gases from blast furnaces operating with increased gas pressures underneath the charge. 12,000 to 14,500 kw may be generated in a gas turbine which operates in conjunction with a large blast furnace and utilizes gases having a gage pressure of 2 atm and a temperature of 600°C. In a modern plant turning out three million tons of rolled stock annually, such turbines can generate 350-450 million kw.hrs per year, i.e., a large portion of the plant's power requirements. 2) Integral gas turbine S's may be combined with a number of

Card 1/2

137-58-5-9034

The Significance of Gas Turbine (cont.)

heat-generating metallurgical aggregates: soaking pits for bloomings, batteries of coke ovens, open-hearth furnaces, and blast-furnace air heaters. The total power capacity of such devices, found in any large metallurgical plant, may amount to several tens of thousands of kw. 3) S's for combined compression and heating of blast-furnace blowing. The employment of such S's saves up to 30% of the fuel. 4) Stationary and transportable turbines utilizing blast-furnace gases and providing power for air blowers and electrical generators.

Ye.N.

1. Industrial plants--Equipment    2. Gas turbines--Applications

Card 2/2

SAZANOV, B.V.

NITSKEVICH, Ye.A., redaktor; SAZANOV, B.V., redaktor; LANOVSKAYA, M.R.,  
redaktor izdatel'stva; BERLOV, A.P., tekhnicheskii redaktor.

[Waste-heat boilers used with open-hearth furnaces; a collection  
of articles] Kotly-utilizatory martenovskikh pechei; sbornik statei  
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metal-  
lurgii, 1957. 229 p. (MIRA 10:5)

(Waste heat) (Boilers)

SAZANOV, B.V., inzh.

Utilizing secondary power resources in the ferrous metallurgy  
industries. Prom.energ.12 no.11:14-17 N '57. (MIRA 10:12)  
(Metallurgy) (Electric power)

SAZANOV, B.V.

Industrial electric power plants of gas turbines. Prom.energ. 16  
no.11:36-41 N '61. (MIRA 14:10)  
(Electric power plants) (Gas turbines)

SAZANOV, B.V.

Utilization of the physical heat of blast-furnace gas. Prom.  
energ. 16 no.12:31-35 D '61. (MIRA 14:12)  
(Blast furnaces)

S/094/62/000/002/002/002  
E194/E485

AUTHORS: Sazanov, B.V., Bogorodskiy, A.S.

TITLE: Comparative costs of transporting compressed air and steam

PERIODICAL: Promyshlennaya energetika, no.2, 1962, 28-33

TEXT: Large turbo-compressors usually have steam turbine drive because it gives more economic control than electrical drive. Industrial installations consuming compressed air are often remote from the local power station or other source of steam and it is usually economically unjustified to construct small boilers for driving turbo-compressor turbines. The question then arises whether it is better to locate the compressor at the source of steam or near the point of air consumption. In the one case compressed air has to be transported over a distance and in the other case steam. This article makes a cost comparison for the case of a large oxygen plant. In designing new oxygen plants, it is obviously best to put the plant close to the power station so that neither air nor steam need be transported, but this is not always possible. In the work which was carried out by the authors in the MEI, a comparison was made for the case of a steam driven Card 1/4 3



Comparative costs of transporting ... S/094/62/000/002/002/002  
E194/E485

compressor for oxygen plants type BP-5 (BR-5) and BP-2 (BR-2) which have oxygen production capacities of 7500 and 30000 m<sup>3</sup>/hour (at n.t.p.) respectively when the distance between the power station and the oxygen plant is from 1 to 3 kilometres. The various factors that enter into the cost of transporting air are considered and it is first shown that the minimum total annual costs in transporting air occur when the speed is 7, 8 or 10 m/sec depending upon whether the cost of conventional fuel is 10, 7 or 3 roubles per ton respectively. When the cost of conventional fuel is 10 roubles per ton the optimum speed is 9.5 m/sec and when it is 3 roubles per ton about 15 m/sec. It is also shown that the optimum air speed is practically independent of compressor output. Similar calculations are then made for steam with the standard steam conditions of 35 atm and 435°C. The results of the calculations for both air and steam are given in Table 2. The tabulated data show that when the distance between the power station and the oxygen plant is between 1 and 3 kilometres and the cost of conventional fuel is 3 roubles per ton or more, it is much cheaper to transport compressed air than steam. The conclusion may be extended to turbine driven compressors used for other

Card 2/3

Comparative costs of transporting ...

S/094/62/000/002/002/002  
E194/E485

purposes, the advantages of transporting air over a distance are the greater the higher the absolute consumption. Moreover, a high pressure steam line requires much more maintenance than an air line. Some of the spaces in the table for steam are left blank because, with the normal back-pressure conditions, steam of suitable parameters could not be delivered. However, if the initial steam supply is for some reason of higher conditions than 35 atm, 435°C, as for example if waste heat boilers operating at more than 40 atm are used the cost of transporting steam may be less and becomes equal to the cost of transporting air when the cost of conventional fuel is of the order of 5 roubles per ton. If the fuel cost is greater it is more advantageous to transport air in this case also. There are 2 figures and 3 tables.

Card 3/1 3

SAZANOV, B.V., dotsent

Use of blast-furnace gas pressure in gas turbine systems.  
Teploenergetika 9 no.8:60-64 Ag '62. (MIRA 15:7)

1. Moskovskiy energeticheskiy institut.  
(Gas turbines) (Blast furnaces)

NITSKEVICH, Ye.A., dots.; KIREVSKIY, G.N., inzh., nauchnyy red.;  
FRIDMAN, I.M., inzh., nauchnyy red.; SAZANOV, B.V., dots.,  
nauchnyy red.; YUSHKOV, S.B., inzh., nauchnyy red.;  
FILIP'YEV, O.V., kand. tekhn. nauk, nauchnyy red.; VESELKOV,  
N.G., inzh., nauchnyy red.; TARNAVSKIY, I.L., inzh., nauchnyy  
red.; IVANOVA, A.N., inzh., red.; ZABAZLAYEVA, E.I., red.;  
LANOVSKAYA, M.R., red. izd-va; DOBUZHINSKAYA, L.V., tekhn.red.

[Heat engineering] Teploenergetika [By] E.A.Nitskevich. Pod red.  
A.N.Ivanova. Moskva, Metallurgizdat, 1962. 348 p.  
(MIRA 16:2)

1. Moscow. TSentral'nyy institut informatsii chernoy metallurgii.  
(Metallurgical furnaces) (Power engineering)